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RAISING COTTON IN UNITED STATES GROWING AND HANDLING OF RAW COTTON

Synopsis of Film

- 1. Planting the Cotton Seed.
- 2. Cotton Blossom and Cotton Boll Opened and Unopened.
- 3. The Destructive Boll-weevil (Beetle) at Work on an Unopened Boll.
- 4. Picking the Cotton.
- 5. Weighing the Cotton for Each Picker.
- 6. Cotton Arrives at the Gin and is Taken up Through Suction Pipe.
- 7. Cotton Gin Separating "Lint" or Fibre from the Cotton Seeds.
- 8. The Work Performed by the Gin.
- 9. Inside of Saw-gin. The Saws Revolve and Pull the Fibres from the Seeds.
- 10. After Removing Seeds, the Cotton is Pressed into Bales.
- 11. On the Way to a Shipping Point.
- 12. Southern Shipping Point.
- 13. Loading Cars for Shipment to a Mill.

RAISING COTTON IN THE UNITED STATES

THE three great needs for the physical welfare of man are food, shelter, and clothing. The cotton plant supplies this last need to a greater extent than does any other material used for the purpose.

Between 40 degrees of north latitude and 40 degrees of south latitude cotton has been grown and used for unknown centuries in various parts of the world, including the American continents. It is a remarkable fact, however, that at the time of the discovery of America cotton was unknown in that section of our country which now

produces three-fourths of the world's supply.

Cotton was introduced into the American Colonies in 1621, but it was not a profitable crop. Not until after the middle of the eighteenth century did exports of cotton assume much importance. With the invention of the spinning jenny and the power loom in England, there sprang up a great demand for cotton, and America began to supply that demand. Before the invention of the cotton gin, in 1792, the annual product of our Southern States was only about 10,000 bales of approximately 500 pounds each. After that machine came into use there was a rapid increase in production. The crop of a recent year exceeded 16,000,000 bales.

The cotton belt of the United States lies south of a line connecting Norfolk, Memphis, Little Rock, and Dallas.

There are numerous varieties of cotton, but the best known are those grown in Egypt, India, and the United States. The most valuable varieties consist of long and fine fibres. Egyptian and Sea Island cotton are the longest and finest, but the crops of these are necessarily limited and the great bulk of cotton grown is that known as American Upland.

The production of cotton has had a potent influence upon the history of our country. If it was not the direct cause of the introduction of slaves, it at least made slavery profitable. It thus produced almost a feudal form of society in the Southern States, where a single plantation often comprised thousands of acres cultivated by hundreds of slaves. In some measure cotton was therefore one of the causes of our great Civil War. After the abolition of slavery the Negro became a renter of the land and to-day most of the cotton crop of the United States is grown by Negroes who pay a certain proportion of their crop as rent for the land.

Cotton is by far the most valuable of our raw material exports. It is worth more than all animal and other vegetable products which we export—more than our exports of wheat, barley, oats, corn, rye, flour, fruits, vegetables, tobacco, liquors, cattle, hogs, sheep, butter, cheese, canned goods, lard, oils, wool, and hides combined. The value of our exported cotton is greater than that of the exported products of all of our farms, ranches, and dairies from Maine to California, and from Minnesota to Texas. Its annual value is greater than the amount of gold yearly produced in the world.

The southern states are peculiarly adapted to the growing of cotton. The soil is fertile, rain is plentiful during the planting season to start the seeds, and the weather is fairly dry while the plant is maturing.

Usually the plowing is done during the fall, in preparation for spring planting. After the plants appear they are repeatedly cultivated with the hand hoe or by horse-drawn cultivators and weeders. Inattention to cultivation and weeding may cause a total loss of the crop. When the young plants reach a height of four or five inches many



of them are "chopped out," in order that there may be only one to about every two feet of row.

The life of the cotton plant may be divided into two periods. The first is that in which the plant makes its growth, varying from two to five feet, according to the variety of seed planted, the soil, the amount of moisture, and cultivation. This period requires heavy moisture and high temperature. In the second period, in which the plants produce seed and lint, less heat and moisture are needed.

About six weeks after the plant appears above the ground the first "square," or bud, is formed. About four weeks later the bud becomes a flower. The flower at first is yellowish white, but quickly changes to pink or red. After three days the five petals fall away, leaving a small boll. This boll grows for sixty days to the size of a hen's egg, when it bursts and discloses a fluffy white ball of cotton lint. This lint is firmly attached to from thirty-two to thirty-six large seeds contained in from three to five cells. The plant continues to blossom from June till frost, though none of the flowers appearing after September first form mature bolls.

The cotton picking season usually begins in August and lasts until November or December, when the plants are destroyed by frost. An expert negro cotton picker will average about 300 pounds a day. After the cotton has been picked, it is ginned and then pressed into bales, and in this form it appears later in the cotton mills.

The cotton gin, invented by a Massachusetts schoolmaster employed in the South, has done more for the progress and prosperity of the United States than has any other single invention. In the most improved form the machine is of two types, the roller and the saw gin. The former is for cotton lint which is loosely attached to the seed as in Sea Island cotton, while the latter is used in ginning the tightly clinging lint of the Upland cotton of the United States.

The farmers haul their cotton in open wagons from which it is sucked up by tubes and carried along on a belt to the gin. This consists of a series of steel circular saws set on a shaft about three-fourths of an inch apart and revolving in slits less than a quarter of an inch wide cut in a steel plate. As the saws revolve the teeth pass through the slits, taking the lint with them and leaving the seeds behind. The lint is removed from the saws by a mechanical brush and is blown through a flue to the lint room, where it is compressed into bales as shown in the film. It is now

ready for shipment to the mills.

The cotton seeds, which were formerly considered a nuisance, have become a valuable by-product of the industry. It was long ago discovered that they contained a useful oil and that they are valuable as a food for farm animals. The seeds are delivered at the oil mill, put into an elevator, and stored at the top of the mill. They are then screened to remove bolls and dirt. They next pass to machines which remove the short fibres of lint that still cling to them, and then to the hullers which cut them into small pieces. The heavy meat of the seeds drops out and is separated from the hulls. These hulls are later pressed into bales and are used as food for cattle, for the making of fine papers, and for fuel the ashes from which are an excellent fertilizer. The meat of the seeds next passes through heavy rollers and is thoroughly crushed. It is then cooked and placed in hydraulic presses by which the oil is squeezed out. The oil is refined and used as a substitute for olive oil, and as an ingredient of butterine, cooking fat, and for many other purposes. The cake from the presses is ground into meal and becomes an important cattle food in combination with grasses and cereals.



QUESTIONS ON FILM

- 1. How is the cotton seed planted? Compare with the planting and cultivation of corn.
- 2. Describe the cotton plant: the blossom, the cotton-boll, size of boll, size of seeds.
- 3. What destroys the cotton-boll? Describe the beetle and the manner in which it destroys the boll.
- 4. Describe the picking of cotton. Can it be done by machinery?
- 5. How many pounds of cotton can the average worker pick in a day?
- 6. How is cotton removed from the wagon at the gin?
- 7. What is a saw-gin? What work does it do? How?
- 8. Why did it revolutionize the cotton industry?
- 9. Describe the method of baling cotton. How pressed? With what covered? With what bound? How many pounds in a bale?
- 10. What animals have you seen in the picture? Why are horses not used?

QUESTIONS, TOPICS, SUGGESTIONS

- 1. Name the states in which cotton is grown.
- 2. What conditions of climate are necessary for cotton growing?
- 3. When is the seed planted? When does the plant mature? When is the cotton picked?
- 4. Of what commercial value is the cotton seed?
- 5. Why does cotton make a good thread?

- 6. What effect has cotton upon occupations, society, and politics in the South?
- 7. Name other great cotton exporting countries.
- 8. What amount of cotton was raised in the United States in 1916? Its value? Value of by-products? Amount of cotton exported? To what countries?
- 9. Report on extent of damage done yearly to cotton crop by the boll-weevil. (Gov't Reports.)
- 10. Bring to class specimens of raw cotton from different countries; unopened and opened cotton boll.



REFERENCES

BURKETT, C. W. & POE, C. H. Cotton; its cultivation, marketing, manufacture, etc. Doubleday, Page & Co., N. Y. 1916. 331 pp. illust.

Brooks, C. P. Cotton; its uses; varieties; fibre structure, cultivation. Spon & Chamberlain, N. Y. & London. 1898. 362 pp. illust. tab. diagrams.

CHILLIG, E. E. The four wonders: cotton, wool, linen, silk. Rand McNally & Co. Chicago, N. Y. 1913. 137 pp. illust.

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